# Pradhan Mantri Fasal Bima Yojana in Haryana: Socio-Economic Analysis

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## INTRODUCTION

Indian economy is primarily depends on Agriculture sector, its around two third population of India is dependent on agriculture and its dependency continuous incessant. Agriculture is a highly risky venture due to both uncertainty in crop production and volatility in prices. Production of agriculture depends on various climatic parameters like temperature, rainfall, sunshine and humidity; this causes a major problem for producers and consumers as well. Agricultural production is a kind of risk business and farmers face many risks. Being the base of most of the developing economies around the world, agriculture of risk possesses considerable threat to the income and general price stability of those countries. This unexpected risk of agriculture cannot be alleviated fully but it can be reduced to certain per cent with the help of insurance. Thus insurance is the phenomenon to control the risk in agriculture particularly to safeguards farm income losses under unfavorable weather condition. Crop insurance tends to protect the farmers against such misfortunes by covering risks in agriculture. To provide financial support and reducing crop loss government has launched various crop insurance schemes in India.

The first agricultural insurance scheme was started in the financial year 1972-73 when the general insurance corporation of India introduced a crop insurance scheme on H-4 cotton and later included groundnut, wheat and potato. This scheme was based on individual approach and implemented in six states on voluntary basis. This scheme was continued till 1978.

In 1979 pilot crop insurance scheme was launched and based on area approach for providing insurance cover. The scheme covered cereals, millets, oilseeds, cotton, potato and chickpea and it was confined to loanee farmers of institutional sources on voluntary basis but due to many small and marginal farmers could not participate in this crop insurance scheme because majority of farmers had poor access to institution credit therefore this scheme has continued till 1985.

Comprehensive crop insurance scheme in India came into in the year 1985 which continued till 1999. This scheme was linked to short term credit and was based on the

homogeneous approach. The central government introduced them. Comprehensive crop insurance scheme during the year 1985-86. Till Kharif 1999, the scheme was adopted by 15 states and 2 union territories. During 1997-1998 Experimental crop insurance scheme was introduced in 14 districts of 5 states. The scheme was similar to comprehensive crop insurance scheme, except that it was meant only for small/ marginal farmers with 100 per cent subsidy on premium. Both pilot crop insurance scheme and Comprehensive crop insurance scheme were confirmed only to farmers who had borrowed seasonal agricultural loans from financial institutions. The main distinguishing features of the two schemes were that comprehensive crop insurance scheme was compulsory for loanee farmers.

National Agriculture Insurance scheme is the government sponsored crop insurance scheme and was started from Rabi session of 1999-2000. Initially The General Insurance Company of India was the implementing agency of the scheme but after April 2003, Agriculture Insurance Company Of India Limited (AIC) which was incorporated in December, 2002 and had begun functioning in 2003 took over the implementation of National Agricultural Insurance Scheme. National Agricultural Insurance Scheme is the world‟s largest area yield index insurance programme. In Haryana, crop insurance was introduced in Kharif 2004 through agriculture insurance company. Government of Haryana adopted National Agriculture Insurance scheme with the collaboration of Government of India. Arhar, Bajra, cotton, maize crops during Kharif and Mustard, Barley and Gram were covered under this scheme.

Modified National Agricultural Insurance Scheme will be implemented on a pilot basis in 50 districts starting from the Rabi season of 2010-11. It is a centrally sponsored scheme which was launched after a lot of modification in National Agricultural Insurance Scheme. In Haryana, Modified National Agriculture Insurance Scheme was started in Karnal and Kaithal for Paddy crop on experiment basis. The financial performance of Modified National Agricultural Insurance Scheme was evaluated using the financial variables like total farmer covered, area covered sum insured, total premium, number of beneficiaries and claim paid were estimated of Haryana.

A new scheme was launched by government of India named „Pradhan Mantri Fasal Bima Yojana‟ in 2016. It was started in Kharif season of year 2016 and implemented among all the states and union territories of India. Pradhan Mantri Fasal Bima Yojana was formulated in line with one nation-one scheme then by replacing previously known as „National Agriculture Insurance Scheme and modified National Agriculture Insurance Scheme. Pradhan Mantri Fasal Bima Yojana is compulsory for loanee farmers availing crop

loan/KCC account for notified crops and voluntary for others. Pradhan Mantri Fasal Bima Yojana overtook almost earlier schemes which were already providing some of comprehensive risk coverage from sowing to harvesting losses. Pradhan Mantri Fasal Bima Yojana provides a comprehensive insurance cover against failure of the crop thus help in stabiling the income of the farmers. The scheme covers all foods and annual commercials and Pradhan Mantri Fasal Bima Yojana is basically an auction premium type scheme, under which subsidy is provided by both, state and central government in the ratio 50:50 respectively. While fund allocation is from central government.

Objective of the Scheme :

- To provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crops as a result of natural calamities, pests and diseases.
- To stabiles the income of farmers to ensure their continuous process in farming.
- To encourage farmers to adopt innovative and modern agricultural practices.
- To ensure flow of credit to the agriculture sector.

There are three clusters in which Haryana is divided: In Cluster one there are Districts of Sirsa, Bhiwani, Faridabad, Kurukshetra, Kaithal, Panchkula and Rewari. Cluster two contains districts of Hisar, Sonepat, Gurugram, Karnal, Ambala, Jind and Mahendragarh. In the Cluster three, there would be districts of Fathebad, Rohtak, Jhajjar, Mewat, Palwal, Panipat, and Yamunagar. Implementing agency of cluster one, two and three is Reliance General Insurance Company Limited, Bajaj Allianz General Insurance Company Limited and ICICI Lombard General Insurance Company Limited respectively. Cotton, Paddy, Bajra and Maize during Kharif and Wheat, Barley, Gram, Mustard and Sunflower during Rabi are the crops to be covered under the scheme Pradhan Mantri Fasal Bima Yojana.

Pradhan Mantri Fasal Bima Yojana aims to reduce the premium burden on farmers and ensure early settlement of crop assurance claim for the full insured. Government mentioned Indemnity level, areas, sum insured, premium rates and seasonality discipline to get implemented under Pradhan Mantri Fasal Bima Yojana. Sum Insured per Hectare (1 hectare- 2.471 acres) in Pradhan Mantri Fasal Bima Yojana in Kharif Season for Paddy is 77800, for Cotton is 76600, for Maize is 38300 and for Bajra is 37000. In Rabi Season, Sum Insured per Hectare for Wheat is 63000, for Barley 40750, for Sunflower is 39500, for Gram 29600, and for Mustard 38500. In 2016-2017 year government allocated fund amounting

rupees 11054.63 crores. On other side in 2017-18 government allocated fund amounting rupees 9419.79 crores and in year 2018-19 government sanctioned fund 13014.15 crores. Under PMFBY total farmer‟s applicant which are covered under this scheme all over India are 57249843 in 2016-17 and among this 1336028 are from Haryana and in 2017-18 total applicant all over the India which applied for this scheme are 48749066 and among this 1335764 are belong to Haryana. Pradhan Mantri Fasal Bima Yojana crops to be covered on the basis of area approach in the insurance unit, which would be the revenue estate. Cluster approach system is being implemented to the entire state.

## Review of literature

It is necessary to review the available previous studies and literature to frame objective, hypothesis and methodology. By considering this, the following are brief details about the reviews related to the present study.

**Soni and Trivedi (2013)** highlighted the existing scenario of crop insurance in India with a special reference to Gujarat. In the study "crop Insurance: An empirical study on awareness and Perceptions" the study was based on primary source such as surveying, questionnaire and snowball sampling method. The information obtained from farmers was analyzed and interpreted with the help of SPSS 17 and Microsoft Excel Programmes. For data analysis, frequency distribution, descriptive statistics were used and wilcoxon paired sample test was applied to compare the awareness level of farmers for crop and cattle insurance in Anand district. The study empirically checked the awareness level of farmers in Anand district. This paper further examines the perception of those who availed and not availed crop insurance in various villages of Anand district. This paper found that merely 4 per cent of the sample were having crop insurance and 96 per cent were not availing crop insurance. The major finding was that the farmers who were not availing crop insurance were illiterate. This paper identifies the impact of educational efforts for spreading the awareness for crop insurance in the selected area. The study suggested for increasing the awareness level of the farmers for ensuring better penetration of crop insurance in Anand district.

**Srinivasulu (2015)** conducted a study on "Agriculture crop insurance policies in India –A study on Pradhan Mantri Fasal Bima Yojana (PMFBY) in Telangana State". In his study he highlighted that many of the industries get their raw material from agriculture sector. Agriculture production is inherently risky business and farmers face a variety of risks such as

production risk, price or market risk, financial and credit risk, institutional risk, health risk and technology risk. Shri Narender Modi had announced a crop insurance scheme named Pradhan Mantri Fasal Bima Yojana. Under the Pradhan Mantri Fasal Bima Yojana there are no upper limits on government subsidies provided by centre and state governments. This paper concludes that majority of farmers is small and marginal and hence use of technology is difficult for them. This paper also found that there is lack of interaction between the future and spot markets. These loopholes were to be addressed along with taking steps to improve the insurance coverage.

**Inderjeet (2016)** carried out a study entitled "Study on the benefits of Fasal Bima Yojana for farmers". He highlighted that Crop insurance was one of the most important alternatives to manage such type of risk by the farmers. Insurance is a subject matter of solicitation; unprofessional practices are prevalent in India. The grievance of farmers must be addressed so that the trust of the people does not lose. They conclude with the recommendation that there is strong need of the hour to educate rural people with regards to insurance as a concept and as a product. The study discussed that the new scheme is different from earlier schemes such that it is open to all farmers, lowest premium and optional for non-loanee farmers. The study also suggests designing policies especially for the rural people rather than selling the same policies which are being sold to the urban people.

**Nandan (2016)** worked on " Pradhan Mantri new Fasal Bima Yojana" the new program has a design that can offer more timely, calm settlement, less distortion in the allocation government subsidy. The government of India started offering a widespread crop insurance program with the comprehensive crop insurance scheme. Every scheme has been flawed, yet the government of India is still attempting to strengthen agriculture protecting its farmer from the weather conditions. After examining the various existing crop insurance schemes he explained the silent features of Pradhan Mantri Fasal Bima Yojana that there will only one premium rate for each season for all foodgrains, oilseeds and pulses – removing all variation in rates across crops and districts within a season– Kharif: 2 per cent, Rabi: 1.5 per cent only. He also recommended for improving crop insurance, a web portal should be developed for all states to make land record data be available to financial institutions and Premium rates to be revisited for Modified National Agriculture Insurance Scheme.

**Pradeepika (2017)** conducted a study entitled "the insights into the new crop insurance scheme in Haryana state". The study was based on primary sources. It was an

attempt to understand the different issues and strategies related to the implementation of Pradhan Mantri Fasal Bima Yojana in Haryana State. The study concluded with the recommendations that there was a strong need of the hour to educate rural people with regards to insurance as a concept and as a product for effective implementation of this new crop insurance scheme.

**Aditya et al. (2018)** carried out a study on "Adoption of crop insurance and impact: Insight from India" he told that it was a complementary institutional mechanism that aids farmers to cope with risks better. The study was based on primary and secondary sources such as situational assessment survey of farmers conducted by national sample survey office in 2012-13 and using data from large scale farmer‟s survey. In his study probit regression model was used for drivers of adoption of crop insurance. The study has also identified the factors that influenced farmer‟s decision to buy crop insurance and subsequently assess its impact on farm income, production expenses and productive investment in agriculture. Farmer‟s adoption of crop insurance was low 4.8 per cent in Kharif season and 3.17 per cent in the Rabi season. The reason for low adoption crop insurance was due to lack of awareness about insurance products. Impact of crop insurance on the value of output, crop production expenses and investments of rice growers were inconclusive from the study because low awareness about crop insurance. The probability of adoption of insurances was higher for those who experience higher crop loss. He observed that educated farmers with better extension contact were more likely to insure their crops.

**Deepa et al. (2018)** worked on "Crop Insurance in Northern Eastern States of India: Performance of National Agricultural Insurance Scheme" this paper assessed the performance of crop-based on National Agricultural Insurance Scheme in north-eastern states of India. It was based on secondary sources which were collected from agriculture insurance company of India limited. It was found that there was significant increase in trend of coverage of farmers and area insured for the states like Assam, but for states like Meghalaya and Tripura, the increase was marginal and negative for Manipur and Sikkim. Parameters like claim paid and farmers benefitted have a significant effect on the area insured and farmer‟s coverage over the years and play a vital role in increasing the area insured and farmer‟s coverage, ultimately deciding to participate in crop insurance. This paper with a clear objective illustrated the penetration of the national agriculture insurance scheme in the north eastern region. The government of India introduced Pradhan Mantri Fasal Bima Yojana recently as a

complementary scheme covering both leased crop yield and weather-based insurance with certain innovative measures and improved premium price.

**Ghanghas (2018)** carried out a study on "Awareness of Pradhan Mantri Fasal Bima Yojana among farmers in Haryana State". The study was based on primary data. It used purposive and systematic random sampling method. He discussed that 91.67 per cent of respondents were aware of latest crop insurance scheme. It was essential for public awareness and capacity building campaign for farmers through bank personnel, agricultural department and village panchayats to convince farmers for voluntary adoption of such risk mitigating schemes. He concluded that 93.33 per cent of farmers adopted the compulsory proposal for loanee farmers while 6.67 per cent adopted it voluntarily.

**Mathur and Gupta (2019)** Carried out the study entitled "Pradhan Mantra Fasal Bima Yojana and farm risk management-A study of Jammu District". The study was based on primary and secondary resources like interview, group discussion and Banks, Insurances agencies, Agricultural Department etc. They conducted that government has to provide safeguard the farm sector from the risk of uneven prices and uncertain yields. In their study, they described various crop insurance schemes such as programmed based on individual approach, National Agriculture Insurance Scheme ( Rabi 1999 - 2000), Modified national agriculture insurance scheme( Rabi 2013 - 2014), Weather based crop insurance scheme (Rabi 2013-14), Pradhan Mantri Fasal Bima Yojana (Kharif 2016). They also discussed crops such as horticulture, commercial, Rabi and Kharif crops were considered eligible for crop insurance but at different premium rates. They found that many farmers were not willing to go for the crop insurance because crop insurance benefit stops in case of default on loan payment. The paper also seeks to look at the Pradhan Mantri Fasal Bima Yojana for its comparative superiority over the previous crop insurance schemes.

**Rai (2019)** this paper highlighted "Pradhan Mantri Fasal Bima Yojana: An Assessment of India‟s Crop Insurance Scheme". The government launched the crop insurance scheme, Pradhan Mantri Fasal Bima Yojana to reverse the risk-adverse nature of farmers. Pradhan Mantri Fasal Bima Yojana has improved upon its predecessors; it faces structural, logistical and financial obstacles. This paper assesses the performance of the Pradhan Mantri Fasal Bima Yojana in terms of adaptability and the achievement of the objective of "One Nation, One Scheme. This paper also recommends the strengthen capacity of state governments by increasing funds for rural incentivizing the development and use of

technology and there should be strict compliance with timely compensation to farmers. This paper found that the scheme can include and protect the vulnerable farming population, by not only acting as an insurance scheme but also leading to the financialisation and formalization of the economy.

## Specific Objectives of the study are follows:

1. To ascertain the awareness of Pradhan Mantri Fasal Bima Yojana among the farmers in Haryana.

2. To Study the Physical and Financial performance of Pradhan Mantri Fasal Bima Yojana in Haryana.

3. To analyze the socio-economic impact of Pradhan Mantri Fasal Bima Yojana on farmers of Haryana.

4. To analyze the major problems faced by the farmers and for availing benefits of Pradhan Mantri Fasal Bima Yojana in Haryana.

## Methodology

The study will be based on primary as well as secondary data. By using multistage sampling technique, the representative respondents will be selected from three districts among three clusters. The primary information will be collected from selected respondents with a well structured and pre tested schedule. The suitable statistical tools and technique will be used for data analysis and interpretation. The required secondary information data will be collected from various publications of government of India and Haryana, Directorate of agriculture and Farmer‟s welfare and concerned district level offices etc. Some other aspects of study will be covered as per availability of primary and secondary information.

## Scope of the study

The study will be gone about to assess the insurance coverage and financial support to the farmers in the event of failure of any of the notified crop. This study will focus on the socio-economic impact and financial performance of Pradhan Mantri Fasal Bima Yojana. It also focuses on awareness of the scheme among farmers. Area under this study is extensive,

so this study will cover only selected districts of Haryana. Along with this, it will highlight the major problems faced by the farmers and for availing benefits of Pradhan Mantri Fasal Bima Yojana (PMFBY) in Haryana.

## Significance of the study

The need for the study entitled "Pradhan Mantri Fasal Bima Yojana in Haryana: Socio-Economic Analysis" arises from the fact that agriculture sector play a vital role in state economy and credit is a critical input to maintain growth of agriculture. Pradhan Mantri Fasal Bima Yojana was introduced to provide income stability, financial support and encourage farmers to adopt innovative and modern agricultural practices. The present study will help to analyze the financial performance of Pradhan Mantri Fasal Bima Yojana and its socio-economic Impact on farmers in Haryana. It ascertains the awareness of Pradhan Mantri Fasal Bima Yojana among farmers. This study will highlight the farmer"s problems related availing benefits of Pradhan Mantri Fasal Bima Yojana. It will also provide information about the constraints in operation of Pradhan Mantri Fasal Bima Yojana and will give important suggestions for researchers and policy makers for better policy making.

## Limitation of the study

The present study will have certain limitations. It will be based on primary and secondary data. Primary data will be collected, so possibilities of respondent biasness could be found because of financial and time constraint. It will not undertake whole universe. So it will undertake a sample of selected farmers.

## Chapterization

1. **Introduction: -** It includes background of the topic, significance, objective and limitation of the study.

**2. Review of literature: -** A brief review related to the objectives of the study will be presented in this chapter.

**3. Methodology :-** Area of the study , period of the design , sources of the data , sampling design, statistical tools and technique used for drawing conclusion will be included in this chapter.

**4. Ascertain the awareness of PMFBY**: - In this section ascertain the awareness of Pradhan Mantri Fasal Bima Yojana among farmers.

**5. Physical and Financial performance of Pradhan Mantri Fasal Bima Yojana**: - In this segment the performance of the scheme will be analyzed.

**6. Socio-Economic impact of insurance: -** In this section the socio economic impact of insurance on farmers.

**7. Problems and benefits**: - In this part analyze the problems and availing benefits of the scheme.

**8. Summary and Conclusion**:-A brief summary along with conclusion will be included in this chapter.

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